APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,798	06/04/2001	Robert Landis Howald	D2506	2861

27774 7590 04/04/2005		

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EXAMINER
PHAM, BRENDA H

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 04/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *04 June 2001*.
2a) ☒ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-23* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) *5-23* is/are allowed.
6) ☐ Claim(s) *1-3* is/are rejected.
7) ☐ Claim(s) *4* is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All b) ☐ Some * c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
       application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date *5/23/02*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-23 are pending.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed
> publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3.   Claims 1-3 are rejected under 35 USC 102(a) as being anticipated by RABENKO

et al (US 6,765,931 B1).

Claims 1, Rabenko et al disclose a method for combining two streams,

comprising interpolating one or more samples between existing samples of one of the

two data streams; adjusting a number of samples of said one of the two data stream to

maintain balance in a downstream synchronizing buffer (see figure 17, col. 30, lines 15-

36).

Claim 2, Rabenko et al teach the method according to claim 1, wherein said

adjusting comprises adding or decimating samples from the interpolated samples (see

figure 17, col. 30, lines 15-36).

Claim 3, Rabenko et al teach the method according to claim 1, further comprising

combining the one of said two data streams with the other said two data stream after

said adjusting of said one data stream (see figure 17, col. 30, lines 15-36).

Allowable Subject Matter

4.   Claims 5-23 are allowed over prior art.

5.   Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art made of record does not teach or fairly suggest in combination the method according to claim 1, further comprising: detecting a number of samples in the synchronizing buffer; upon detecting a number of samples below a predetermined lower threshold, inputting a regular sample and last phase delayed sample into the synchronizing buffer and then inputting a predetermined number of phase delayed sample in reverse order into the synchronizing buffer; and upon detecting a number of samples in the synchronizing buffer above a predetermined upper threshold, inputting a predetermined number of phase delayed sample in order into the synchronizing buffer and then disabling writing into the synchronizing buffer for one cycle.

The prior art further fails to teach an apparatus for combining two data stream comprising: a first buffer receiving a first data stream of the two data streams and having an input being clocked in by a first sample clock associated with the first data stream and having an output being clocked out by the first sample clock; an interpolating filter receiving the second data stream and outputting a decimated over sampled version of the second data stream; a multiplexer having a first input being coupled to an output of the interpolating filter, having a second input receiving the

second data stream and outputting a modified data stream; a second buffer receiving the modified data stream, having an input being clocked out by the first sample clock and having a level monitor output; a buffer controller having an input being coupled to the level monitor output of the second buffer, having a first output controlling an output of the multiplexer, having a second output controlling the output of the interpolating polyphase filter and having a third output controlling the output of the second buffer.

The prior art fails to teach a method for combining two asynchronous data stream having clocks offset in frequency comprising: clocking a first data stream into and out of a first buffer using a first clock associated with the first data stream; clocking a second data stream into a second buffer using a second clock associated with the second data stream and clocking the second data stream out of the second buffer using the first clock; interpolating and decimating sample of the second data stream prior to clocking the second data stream into the second buffer based on a overflow or underflow of the second buffer; and combining the output of the first and second buffers.
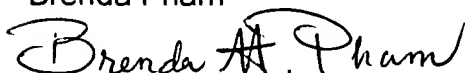
Conclusion

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda Pham whose telephone number is (571) 272-3135. The examiner can normally be reached on Monday-Friday from 9:00 to 5:00.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin, can be reached on (571) 272-3134.

        Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

March 9, 2005
Brenda Pham